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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/790,603	03/02/2004	Shang-Neng Wu	3426W	9144

21129 7590 02/15/2005

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KANSAS CITY, MO 64106-2140

EXAMINER

SANTOS, ROBERT G

ART UNIT	PAPER NUMBER
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3673

DATE MAILED: 02/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/790,603

Applicant(s)

WU, SHANG-NENG

Examiner

Robert G. Santos

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

The previous Office action filed November 5, 2004 did not acknowledge the Preliminary Amendment filed October 29, 2004 since the amendment was inadvertently received after the mailing of the Office action. Accordingly, the following Office action recognizes the claims presented in the aforementioned Preliminary Amendment.

Claim Objections

1. Claims 9, 11, 18, 20 and 23 are objected to because of the following informalities:
 - 1) In the first line of claim 9: The term --the-- should be inserted before the term “pressure”.
 - 2) In the first line of claim 11: The term “value” should be changed to --valve--.
 - 3) In the first line of claim 18: The term --unit-- should be inserted after the term “control”.
 - 4) In the third line of claim 20: The term “valves” should be changed to --values--.
 - 5) In the third line of claim 23: The term “outlet” should be changed to --inlet--.Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 21, 22, 25-28 and 30 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Tringali et al. '837 (note especially Figures 1, 2, 4-6, 8 & 9; column 2, lines 11-51; column 3, lines 52-58; column 4, lines 13-52; column 5, lines 15-36).

4. Claims 21-28 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Johnson et al. '595 (note especially Figures 1-10; column 10, lines 18-68; column 14; and column 15, lines 1-4).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 7-20 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson et al. '595 in view of U.S. Pat. No. 4,949,414 to Thomas et al. Johnson et al. are considered to disclose all of the limitations as recited in claims 7-20 and 29 (see also Figure 1; column 10, lines 38-44; and column 15, lines 30-42) except for the use of pressure sensors interposed between electrically controlled valves in the air supply lines (54-59) and the chambers (109) of the air mattress (110); wherein the control unit (29) receives pressure signals from the pressure sensors and transmits a signal to incrementally close the valve in the air supply line having an air pressure above the predetermined range of pressures or transmits a signal to

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incrementally open the valve in the air supply line having an air pressure below the predetermined range of pressures; and wherein the control unit is able to transmit a signal to incrementally increase the supply of electrical power to the blower motor to increase the blower output if pressure in an air supply line is below a selected range of pressures and the valve in that line is completely open. Thomas et al. '414 provide the basic teaching of an air flow control system comprising an electrically controlled valve (162) in at least one air supply line; a pressure sensor (186) interposed between the electrically controlled valve and at least one chamber (34) of an air mattress; wherein the control unit (29) receives signals from the pressure sensor and transmits a signal to incrementally close the valve in the air supply line having an air pressure above the predetermined range of pressures or transmits a signal to incrementally open the valve in the air supply line having an air pressure below the predetermined range of pressures (as described in column 22, lines 46-68 and in column 23, lines 1-2); and wherein the control unit is able to transmit a signal to incrementally increase the supply of electrical power to the blower motor to increase the blower output if pressure in an air supply line is below a selected range of pressures and the valve in that line is completely open (as described in column 14, lines 64-68 and in column 15, lines 1-4). The skilled artisan would have found it obvious at the time the invention was made to provide the system of Johnson et al. '595 with the use of pressure sensors interposed between electrically controlled valves in the air supply lines and the chambers of the air mattress; wherein the control unit receives pressure signals from the pressure sensors and transmits a signal to incrementally close the valve in the air supply line having an air pressure above the predetermined range of pressures or transmits a signal to incrementally open the valve in the air supply line having an air pressure below the predetermined range of pressures; and

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wherein the control unit is able to transmit a signal to incrementally increase the supply of electrical power to the blower motor to increase the blower output if pressure in an air supply line is below a selected range of pressures and the valve in that line is completely open in order to ensure more readily proper support for a user positioned on the air mattress.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Wu '630 and Wu '629.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert G. Santos whose telephone number is (703) 308-7469. The examiner can normally be reached on Tues-Fr and first Mondays, 10:30 a.m. to 8:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather C. Shackelford can be reached on (703) 308-2978. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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A handwritten signature in black ink, reading "Robert G. Santos". The signature is written in a cursive style with a large, stylized "R" and "S".

Robert G. Santos

Primary Examiner

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R.S.

February 6, 2005